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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/710,442

07/12/2004

Harry T. Edwards

RAP04 P650A

4441

28101 7590 03/16/2007
VAN DYKE, GARDNER, LINN AND BURKHART, LLP
2851 CHARLEVOIX DRIVE, S.E.
P.O. BOX 888695
GRAND RAPIDS, MI 49588-8695

EXAMINER

MATTHEWS, TERRELL HOWARD

ART UNIT

PAPER NUMBER

3654

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

03/16/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/710,442	EDWARDS, HARRY T.	
	Examiner	Art Unit	
	Terrell H. Matthews	3654	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6, 11-16, 18-29 and 34-46 is/are pending in the application.
- 4a) Of the above claim(s) 7-10, 17 and 30-33 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 11-16, 18-29 and 34-46 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-6, 11-14, 18-29, 34-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fowler (US-5124554) in view Lund (US-4244672), in view of Bonnet (US-5868238) in view of Bernard (US-5171120).

Referring to claims 1-2, 14, 21, 36-37, 42-44. Fowler discloses an "Explosives Detector". See Figs. 1- 6 and respective portions of the specification. Fowler further discloses a plurality of screening subsystems, each comprising an automated screen device (26) and a secondary bag screen device (56) and a feed conveyor (12, 14, 16, 18) for feeding bags to the screen device; a supply conveyor (4) for supplying bags to the screening subsystems, wherein the supply conveyor supplying bags only to a screening subsystem that has not more than a particular number of unscreened bags that are at that screening subsystem (See at least Col. 3 l. 34 – Col. 4 ll. 55 & at least Fig. 1); a cleared bag conveyor (6) and an uncleared bag conveyor (8); and a sortation conveyor network downstream of the screening subsystem to selectively divert bags to the cleared bag conveyor or the uncleared bag conveyor (9) (See at least Fig. 1). Fowler does not disclose wherein the sortation conveyor network comprises a buffer downstream of each bag screen device and a pair of diverters associated with each of

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the buffer's, wherein the buffer is buffering bags for a secondary bag screening function or a second diverter downstream of the associated buffer being adapted to divert a bag either to the cleared bag conveyor or the uncleared bag conveyor wherein the bags cleared by either bag screen device or secondary screening function can be diverted to the cleared bag conveyor. It should be noted that Fowler discloses wherein the bags that do not pass the first inspection are sent on the uncleared bag conveyor line to a second screening device (See at least Col. 3 l. 44-47). Lund discloses a "System For Sequencing Articles". See Figs. 1- 3 and respective portions of the specification. Lund further discloses a screen device (16a-c), a buffer downstream of the screen device and a diverter (70) downstream of the buffer adapted to divert bags towards one of two conveyors. Bonnet discloses a "High Speed Smart Diverter For a Conveyor Sorter". See Figs. 1-9 and respective portions of the specification. Bonnet further discloses a conveyor (12) and a diverter (10) that can divert objects in one of three directions. Bernard discloses a "System For Delivery". See Figs. 1-15 and respective portions of the specification. Bernard further discloses a recirculation line, a cleared conveyor line for arranged objects, and an uncleared line for unarranged objects (See at least Figs. 12a-12b). Additionally, Bernard discloses wherein objects are conveyed through various conveyors and wherein arranged (cleared) objects are transported through one path while unarranged objects are transported through another (uncleared) conveyor. It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the apparatus of Fowler to include the teachings of Lund and include buffer downstream of the bag screen devices and a pair of diverters so that bags that

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failed the first inspection and that were sent to the secondary bag screening device could be slowed down to be examined more closely. It should be noted that Fowler discloses wherein the bags that do not pass the first inspection are sent on the uncleared bag conveyor line to a second screening device (See at least Col. 3 l. 44-47). Additionally, it would have been obvious to include the teachings of Bonnet and Bernard and include a diverter and delivery system as taught so that based on the results from the inspection at the secondary screening device the objects could be diverted to the appropriate conveyor afterwards which would make the process more efficient, safer, and take up less space since items that passed the second inspection could be diverted to the cleared conveyor without using a second line. It should be noted that it is generally known in the field of the art to provide conveyor systems with buffers and diverters so that items can be slowed down and diverted to appropriate locations based on their sorting results. Furthermore, it should be noted as it is generally noted in the field of the art, that it would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the apparatus of Fowler so that items that were more closely examined at the secondary bag screening device were further examined manually. This would have been obvious so that if bags were accidental in failing the inspection could be manually inspected and directed to the correct area as well as so that bags that failed the secondary screening function could be manually inspected for contraband contents.

Referring to claim 3-4,38-39,45-46. Fowler discloses the invention as described above. Fowler further discloses that after the package comes off supply conveyor (4) it

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is selected for a channel (A, B, C, D) to be screened and that it passes over rollers (22) before preceding to it's respective feed conveyor (12, 14, 16, 18). Fowler does not disclose that the supply conveyor is at a second speed that is greater than the first speed of the feed conveyor or that the feed conveyor includes a deceleration conveyor. It is broadly construed and understood that feed conveyors (12, 14, 16, 18) or at a speed that is slower than supply conveyor (4) so that items are moving at a relatively slow pace when they are subjected to the baggage screening device and subsequently x-rayed. It would have been obvious to a person of ordinary skill in the art to modify the apparatus of Fowler so that the feed conveyor included a deceleration conveyor to slow down the items from the supply conveyor so that items could be moving at a relatively slow pace when they were subjected to the screening device and x-rayed.

Referring to claim 5-6,40-41. Fowler discloses a diverter (20), which controls orientation of the bag and selectively diverts bags to the appropriate screening subsystem (See Pg. 7 Para. 2). Additionally, Fowler discloses that diverter (20) is swung open and across conveyor (4) to entrain the respective baggage item. It is broadly construed and understood from Fig. 1 and respective portions of the specification that the diverter (20) is a powered diverter as the diverter (20) is opened and closed automatically with respect to whether or not a package is in the respective channel.

Referring to claims 11,18. Fowler discloses the invention as described above. Fowler further discloses the inspection apparatus comprising an x-ray inspection chamber (26), an x-ray radiography unit (40), and a neutron radiography chamber (42).

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Fowler discloses as well that items that do not pass the first inspection or re-routed to conveyor (8) which delivers them to a designated location for closer examination.

Fowler does not disclose that the secondary screening function uses images of bags captured by said screen device. However, it would have been obvious to a person of ordinary skill in the art to modify the apparatus of Fowler so that the secondary bag screening function used images of bags captured by screen device. This would have been done so that the bags could be examined more closely so that hazardous materials or weapons could be found. It should be noted that the secondary screening function could use x-rays as images taken from the initial screening. Furthermore, it should be noted as it is generally noted in the field of the art, that it would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the apparatus of Fowler so that items that were more closely examined at the secondary bag screening device were further examined manually. This would have been obvious so that if bags were accidental in failing the inspection could be manually inspected and directed to the correct area as well as so that bags that failed the secondary screening function could be manually inspected for contraband contents

Referring to claims 12,19. Fowler disclose that packages (7) are fed from the supply conveyor (4) to the circulating belt of feed conveyors (12, 14, 16, 18) and additionally discloses that packages are recycled if all the feed channels are temporarily full (See Pg. 7 Para. 2).

Referring to claims 13,20. Fowler discloses that the bags are constantly traveling while on the supply conveyor and the feed conveyor. Fowler discloses that the supply

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conveyor is in continuous motion since it recirculates the packages and that feed conveyors comprise circulating belts.

Referring to claims 22-29,34-35. With respect to claims 22-25,28-32, 35 the method described in these claims would inherently result from the use of Fowlers "Explosive detector" invention as applied to claims 1-6,11-14,18-21 in view of Lund, Bonnet and Bernard as advanced above.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Hatton (US-9715005) discloses a "Conveyorised Sortation System" comprising a sortation conveyor loop, diverters, and a sort loop where unsuccessfully scanned baggage is manually examined and sorted.

Issacs (US-6471044) discloses a "Hold and Release Singulator" comprising a supply conveyor, screening subsystems, cleared bag and uncleared bag conveyor lines, and diverters.

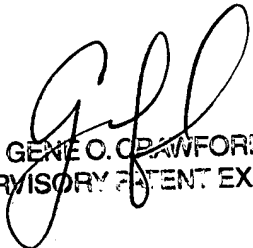
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Terrell H. Matthews whose telephone number is (571)272-5929. The examiner can normally be reached on M-F 8am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kathy Matecki can be reached on (571) 272-6951. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

THM


GENE O. CRAWFORD
SUPERVISORY PATENT EXAMINER